

## AMENDMENTS TO THE CLAIMS

**Please amend the claims as follows:**

**Claim 1 (Currently Amended):** An isolated or purified protein fragment having antimicrobial activity, wherein said protein fragment is a polypeptide ~~having~~ a sequence consisting of the sequence, C-3X-C-nX-C-3X-C (SEQ ID NOS: 38 and 39), wherein n is 11 or 12, X is any amino acid residue other than cysteine, and C is cysteine.

**Claim 2 (Cancelled)**

**Claim 3 (Currently Amended):** An isolated or purified protein having antimicrobial activity and having a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 3, and SEQ ID NO: 5.

**Claims 4-10 (Cancelled)**

**Claim 11 (Previously presented):** A composition comprising the protein fragment of claim 1 together with an agriculturally-acceptable carrier diluent or excipient.

**Claim 12 (Currently Amended):** A composition comprising ~~a~~the protein fragment ~~according to~~of claim 1 together with a pharmaceutically-acceptable carrier diluent or excipient.

**Claim 13 (Cancelled)**

**Claim 14 (Cancelled):** A method of controlling microbial infestation of a mammal, said method comprising treating the mammal with a protein fragment according to claim 1.

**Claim 15 (Cancelled):** The method of claim 14, wherein said mammal is a human.

**Claim 16 (Cancelled)**

**Claim 17 (Currently amended):** ~~The~~An isolated or purified protein fragment having antimicrobial activity of claim 1, wherein said protein fragment is a polypeptide ~~comprising~~ a cysteine and tyrosine or phenylalanine spacing of consisting of the sequence Z-2X-C-3X-C-(10-12)X-C-3X-C-3X-Z (SEQ ID NOS: 34-36), wherein X is any amino acid residue other than cysteine, and C is cysteine ~~wherein X and C are as defined in~~ claim 1, and Z is tyrosine or phenylalanine.

**Claim 18 (Currently Amended):** ~~The~~An isolated or purified protein fragment having antimicrobial activity of claim 1, wherein said cysteine spacing comprises protein fragment is a polypeptide consisting of the sequence, C-2X-C-3X-C-(10-12)X-C-3X-C-3X-C (SEQ ID NOS: 31-33), wherein X is any amino acid residue other than cysteine, and C is cysteine wherein X and C are as defined in claim 1.

**Claim 19 (Previously presented):** An isolated or purified protein fragment having antimicrobial activity, wherein said protein fragment is selected from the group consisting of:

residues 29 to 73 of SEQ ID NO: 1  
residues 74 to 116 of SEQ ID NO: 1  
residues 117 to 185 of SEQ ID NO: 1  
residues 186 to 248 of SEQ ID NO: 1  
residues 29 to 73 of SEQ ID NO: 3  
residues 74 to 116 of SEQ ID NO: 3  
residues 117 to 185 of SEQ ID NO: 3  
residues 186 to 248 of SEQ ID NO: 3  
residues 33 to 75 of SEQ ID NO: 5  
residues 76 to 144 of SEQ ID NO: 5  
residues 145 to 210 of SEQ ID NO: 5  
residues 34 to 80 of SEQ ID NO: 7  
residues 81 to 140 of SEQ ID NO: 7  
residues 33 to 79 of SEQ ID NO: 8  
residues 80 to 119 of SEQ ID NO: 8  
residues 120 to 161 of SEQ ID NO: 8  
residues 32 to 91 of SEQ ID NO: 21  
residues 25 to 84 of SEQ ID NO: 22  
residues 29 to 94 of SEQ ID NO: 24; and  
residues 31 to 85 of SEQ ID NO: 25.

**Claims 20-29 (Cancelled)**

**Claim 30 (Previously presented):** A composition comprising the protein fragment of claim 19 together with an agriculturally-acceptable carrier diluent or excipient.

**Claim 31 (Previously presented):** A composition comprising the protein fragment of claim 19 together with a pharmaceutically-acceptable carrier, diluent or excipient.

**Claims 32 and 33 (Cancelled)**

**Claim 34 (Withdrawn):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the composition of claim 11 for a period sufficient to reduce the number of said microbes.

**Claim 35 (Cancelled)**

**Claim 36 (Previously presented):** A method of controlling microbial infestation of a mammal, the method comprising treating the mammal with a composition according to claim 12.

**Claim 37 (Currently amended):** The method of claim 36, wherein said mammal is a human.

**Claim 38 (Cancelled)**

**Claim 39 (Previously presented):** A method of controlling microbial infestation of a mammal, the method comprising treating the mammal with a composition according to claim 30.

**Claim 40 (Previously presented):** The method of claim 39, wherein said mammal is a human.

**Claims 41-42 (Cancelled)**

**Claim 43 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the composition of claim 30 for a period sufficient to reduce the number of said microbes.

**Claims 44-46 (Cancelled)**

**Claim 47 (Previously presented):** A composition comprising the isolated or purified protein of claim 3 together with an agriculturally-acceptable carrier diluent or excipient.

**Claim 48 (Cancelled)**

**Claim 49 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the

isolated or purified protein of claim 3 for a period sufficient to reduce the number of said microbes.

**Claim 50 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the protein fragment of claim 17 for a period sufficient to reduce the number of said microbes.

**Claim 51 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the protein fragment of claim 18 for a period sufficient to reduce the number of said microbes.

**Claim 52 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the protein fragment of claim 19 for a period sufficient to reduce the number of said microbes.

**Claim 53 (Cancelled)**

**Claim 54 (Previously presented):** A method of reducing the number of microbes infesting a plant, the method comprising administering to said plant an effective amount of the composition of claim 47 for a period sufficient to reduce the number of said microbes.

**Claim 55 (New):** The method of claim 50, wherein said microbe is a fungus.

**Claim 56 (New):** The method of claim 51, wherein said microbe is a fungus.

## SUMMARY OF INTERVIEW

### Exhibits and/or Demonstrations

None

### Identification of Claims Discussed

Claims 1, 2-3, 18, 20, and 21

### Identification of Prior Art Discussed

None

### Proposed Amendments

The Examiner contacted the undersigned to suggest some amendments to the claims to place the application in condition for allowance.

### Principal Arguments and Other Matters

None

### Results of Interview

The Applicant needed to be consulted regarding the Examiner's proposed amendments. Accordingly, the Examiner agreed to issue the present Office Action to give Applicant time to review the proposed amendments and provide a considered response.